## ABSTRACT

# PROCESS FOR AUTHENTICATING DIGITAL IMAGES AND DEVICE IMPLEMENTING THE PROCESS

The invention relates to a process for authenticating digital images as well as a system implementing the process.

The system implementing the process comprises a picture taking device - camera or photographic apparatus - and a device for processing the information emanating from the picture taking device.

The picture taking device comprises means for hashing and signing successive fractions of the filmed or photographed signal. The signal emanating from the picture taking device is constructed by multiplexing the plain signal and the hashed and signed signal fractions.

The processing device comprises a demultiplexer for separating the hashed and signed data from the plain signal, means for hashing the signal fractions which correspond to the signal fractions which have been hashed and signed in the picture taking device, means for performing public-key encryption of the hashed and signed signal fractions, and means for comparing the signal fractions hashed in the processing device with the data emanating from the public-key encryption operation.

The signal emanating from the comparator then makes it possible to indicate whether the digital images which have been filmed are authentic or falsified.

The invention applies more particularly to news reporting cameras in the professional domain.

No figure